

Appl. No. : 10/766,371
Filed : January 27, 2004

AMENDMENTS TO THE CLAIMS

1-12. (Withdrawn)

13. (Original) A device for testing a plurality of semiconductor devices comprising:

a housing;

a grid comprising of a plurality of connected frames within the housing;

at least one flexible membrane attached to the grid and extending over a plurality of the connected frames to form a plurality of chambers;

a plurality of contact members positioned on the at least one flexible membrane and configured to provide an electrical connection to a plurality of electrical contacts on the plurality of semiconductor devices to be tested; and

at least one fluid channel connecting at least one of the chambers to a fluid source outside the housing to allow a fluid to flow into at least one of the chambers.

14. (Original) The device of Claim 13, wherein the at least one flexible membrane comprises a plurality of flexible membranes.

15. (Original) The device of Claim 13, wherein the plurality of semiconductor devices are on an integrated circuit in board on chip configuration.

16. (Original) The device of Claim 13, wherein the fluid comprises a gas.

17. (Original) The device of Claim 16, wherein the fluid comprises air.

18. (Original) The device of Claim 13, wherein the fluid comprises a liquid.

19. (Original) The device of Claim 13, wherein the fluid source comprises a pump.

20. (Original) The device of Claim 19, wherein the fluid source comprises an electric pump.

21. (Original) The device of Claim 13, further comprising at least one passage between a plurality of the chambers allowing the fluid to flow between the chambers.

22. (Original) The device of Claim 13, further comprising at least one stop connected to the flexible membrane to restrict the flexible membrane from recessing beyond a predefined level.

23-32. (Withdrawn)

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33. (New) The testing device of Claim 13, wherein the plurality of contact members are bumps.

34. (New) The testing device of Claim 13, wherein the plurality of contact members are configured to define a plurality of piercing contacts.

35. (New) The test device of Claim 22, wherein the stop comprises a plurality of deformable members connected to the plurality of contact members and extending within the chamber to contact a portion of the housing when the plurality of contact members are moved toward the chamber a distance that exceeds the predefined level.

36. (New) The testing device of Claim 35, wherein the plurality of deformable members comprises a plurality of elastomer members having a height of less than a depth of the chamber.